

NCR-19-7394



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBT18402
Job Sheet 197577



Part No: RBT18402

Job Qty: 32 pcs

Part Name: Forward Air Transport Shoring Jack



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 7/10/19

Job Tracking No:

Due Date: 9/10/19

Created By: Marie Lajeunesse

Type: SOLD

Description: ORDER 17604

Note: DWG RBT18402 Rev 1A IPP Rev. A 19.07.03 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Small Fab - 1	32 pcs	9/10/19		0.00	6.40	Small Fab - 1		SEP 09 2019
							Small Fab - 2		
							Small Fab - 3		
							Small Fab - 4		
							Small Fab - 5		
							Small Fab - 6		
							Small Fab - 7		
110	QC 5	32 pcs	9/10/19		0.00	0.00	QC 5 - 10		
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
							QC 5 - 40		
							QC 5 - 61		
							QC 5 - 81		
120	Packaging 3-1 - Stock - B4B	32 pcs	9/10/19		0.00	0.00	Packaging 3 - 1 - B4B		
							Packaging 3 - 2 - B4B		
							Packaging 3 - 3 - B4B		
							Packaging 3 - 4 - B4B		
							Packaging 3 - 5 - B4B		



Dart Aerospace Ltd.
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CANADA
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Email: sales@dartaero.com
www.dartaerospace.com

Container No: S215242



Part: RBT18402

Job No: 197577

Serial No/Batch: S215242

Revision: 1A

Inspector:

Exp Date:

Instructions:

Date: 09/19/19

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				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
130 QC 21 - FG	32 pcs	9/10/19	0.00 0.00	QC 21 - FG - 21	
				QC 21 - FG - 70	
				QC 21 - SA - 53	

Part Op 100 - Assemble as per DWG.

Descriptions: 110 - QC5- Inspect part completeness to step on W/O

120 - Identify as per dwg & Stock Location:

130 - QC21- Final Inspection - Work Order Release

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
30345T24	Lanyards	32 Ea (1 ea)	100-Small Fab - 1	5199297
8492A378	Drill Bushing, 1/2 X 3/8	64 Ea (2 ea)	100-Small Fab - 1	5199302
90099A031	Lock Nut, 3/8-16 X 11/16 W X 35/64 H	32 Ea (1 ea)	100-Small Fab - 1	5199351
90298A725	Shoulder Bolt, 3/8-16 X 3-7/8	32 Ea (1 ea)	100-Small Fab - 1	5199298
90980A565	Ball Lock Pin, 1/2 X 4-1/2	32 Ea (1 ea)	100-Small Fab - 1	521230x4 321065 1x4
90980A645	Ball Lock Pin, Ø5/8 X 2-1/2	32 Ea (1 ea)	100-Small Fab - 1	5202430 x27.
91770A188	Machine Screw, 8-32 X 3/16	32 Ea (1 ea)	100-Small Fab - 1	5199361
91771A542	Machine Screw, 1/4-20 X 1 Phillips Flathead	256 Ea (8 ea)	100-Small Fab - 1	5199353
98126A694	Shim Washer, 1/2 ID X 3/4 OD X 0.48	64 Ea (2 ea)	100-Small Fab - 1	5199322
INAS1756-12	Remove Before Flight	32 Ea (1 ea)	100-Small Fab - 1	5055799x21
RB41011	Dart Tooling Placard, Aluminum	32 pcs (1 ea)	100-Small Fab - 1	5021040
RBT18402-1	Jack Weldment	32 pcs (1 ea)	100-Small Fab - 1	5206068
RBT18402-13	Foot Weldment	32 pcs (1 ea)	100-Small Fab - 1	5206786
RBT18402-19	Foot Pad	32 pcs (1 ea)	100-Small Fab - 1	5206952
RBT18402-7	Tube Insert Weldment	32 pcs (1 ea)	100-Small Fab - 1	5211140

30345T55 Lanyard 18"

94792A127 M6 Machine screw

~~90081A106~~

32 pcs (1 ea) 100-small Fab

64 pcs (2 ea) 100-small Fab

~~128 pcs~~

5212826

5212831 →

90081A106

910654A106

96

5161005

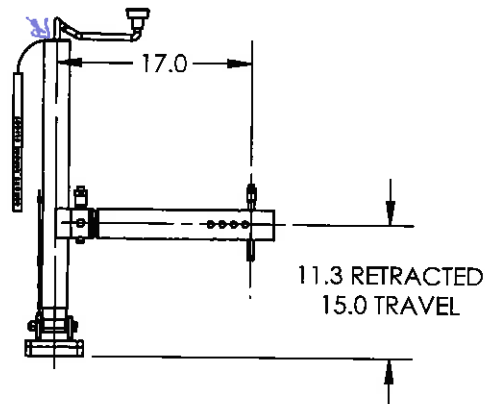
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Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-Small Fab - 1	30345T24	32	1	0
	8492A378	64	0	0
	90099A031	32	0	0
	90298A725	32	0	0
	90980A565	32	0	0
	90980A645	32	0	0
	91770A188	32	0	0
	91771A542	256	0	0
	98126A694	64	0	0
	NAS1756-12	32	134	0
	RB41011	32	280	0
	RBT18402-1	32	0	0
	RBT18402-13	32	0	0
	RBT18402-19	32	0	0
	RBT18402-7	32	0	0
Part Specifications				
Specifications could not be found.				

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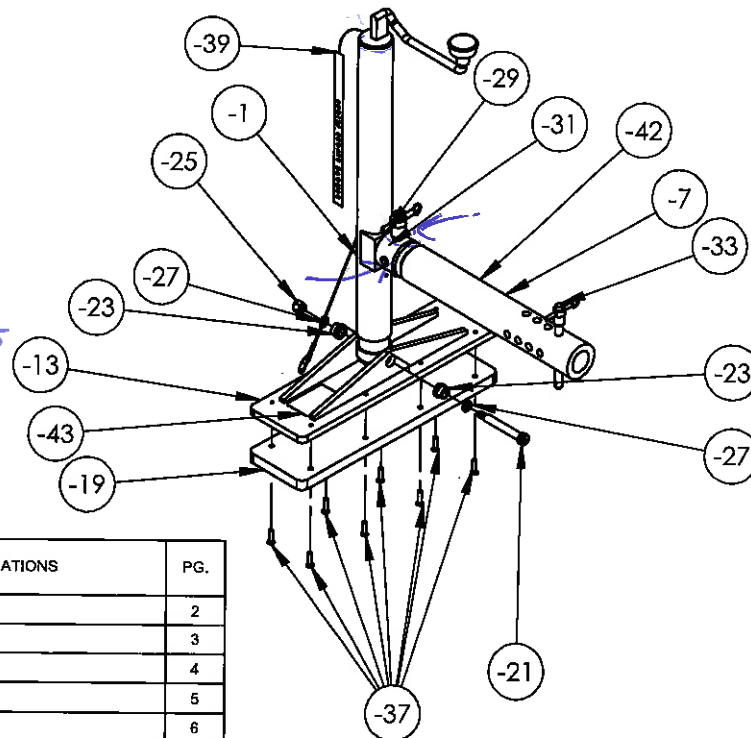
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REVISIONS			
REV	DESCRIPTION	DATE	INITIAL
1	CHANGED JACK FROM 178101 TO 178151, SHY 2 TUBULAR MOUNT LOCATION CHANGED, SHY 3 8-32 LOCATION MOVED	2/11/2011	JAG
1A	ADDED SHY 13, 14 ARTICLE INSPECTION, SHY 12 CHANGED WEIGHT FROM 3500 TO 1800	2/25/2011	JAG



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CONTROLLED COPY

197577 MWS
1907-10



ASSY QTY	ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
		X		-1	1	JACK WELDMENT			2
		1		-3		JACK	ALUMINUM	FULTON JACK # 178151	3
		1		-5		FOOT ADAPTER MOUNT	1018	2-1/4 OD x 2-1/8	4
X				-7	1	TUBE INSERT WELDMENT			5
	1			-9		TUBE	6061	2-1/2 OD x 1/2 WALL x 15-5/8	6
	1			-11		ADAPTER PLUG	6061	2-1/2 x 4-1/8 ROUND BAR	7
X				-13	1	FOOT WELDMENT			8
1				-15		FOOT PLATE	6061	1/2 x 5 x 18 FLAT BAR	9
2				-17		GUSSET	6061	3/8 x 2-1/8 x 14-1/8	10
				-19	1	FOOT PAD	MARINE PLYWOOD	3/4 x 5 x 18	11
			B/O	-21	1	SHOULDER BOLT	18-8 S.S.	3/8-16 x 3-7/8 MCMaster-CARR #90298A725	1
			B/O	-23	2	DRILL BUSHING	CASE-HARDENED STEEL	1/2 x 3/8 MCMaster-CARR #8492A378	1
			B/O	-25	1	LOCK NUT	18-8 S.S.	3/8-16 x 11/16 W x 35/64 H MCMaster-CARR #90099A031	1
			B/O	-27	2	SHIM WASHER	18-8 S.S.	1/2 ID x 3/4 OD x .048 MCMaster-CARR #98126A694	1
			B/O	-29	1	BALL LOCK PIN	S.S.	Ø5/8 x 2-1/2 MCMaster-CARR #90980A645	1
			B/O	-31	1	LANYARD	S.S.	12" W TAB MCMaster-CARR #30345T24	1
			B/O	-33	1	BALL LOCK PIN	S.S.	1/2 x 4-1/2 MCMaster-CARR #90980A565	1
			B/O	-35	1	LANYARD	S.S.	24" W TAB MCMaster-CARR #30345T26	1
			B/O	-37	8	MACHINE SCREW	S.S.	1/4-20x 1 PHILLIPS FLATHEAD MCMaster-CARR #91771A542	1
			B/O	-39	1	REMOVE BEFORE FLIGHT	NYLON	NAS 1756-12	1
			B/O	-41	1	HOOK AND LOOP	NYLON	1" x 24" CINCH RING MCMaster-CARR #3955T229	1
			B/O	-42	1	MACHINE SCREW	S.S.	8-32 X 3/16 MCMaster-CARR #91770A188	1
				-43	1	PLACARD	ALUMINUM	USE RB41009 WITH T/N, S/N, AND LOAD SPEC	1
ASSY	ASSY	ASSY							
-13	-7	-1							



RED BARN MACHINE

TITLE
FORWARD AIR TRANSPORT SHORING JACK

DWG NO.

RBT18402

REV
1A

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON:
DECIMALS
XXX ± .005
XX ± .01
X ± .1
FRACTIONS ± 1/32
ANGLES ± 5°

DRAWN BY: GILBERT
APPROVED: D. Wed
REACT
TREAT
FINISH
SPEC

UNLESS OTHERWISE SPECIFIED
1. BREAK ALL SHARP EDGES
.015 x 45° PR .015 R
2. DIMENSIONAL LIMITS APPLY AFTER PLATING

USED ON MODEL
FIRE SCOUT MQ-8B

SCALE 1:12

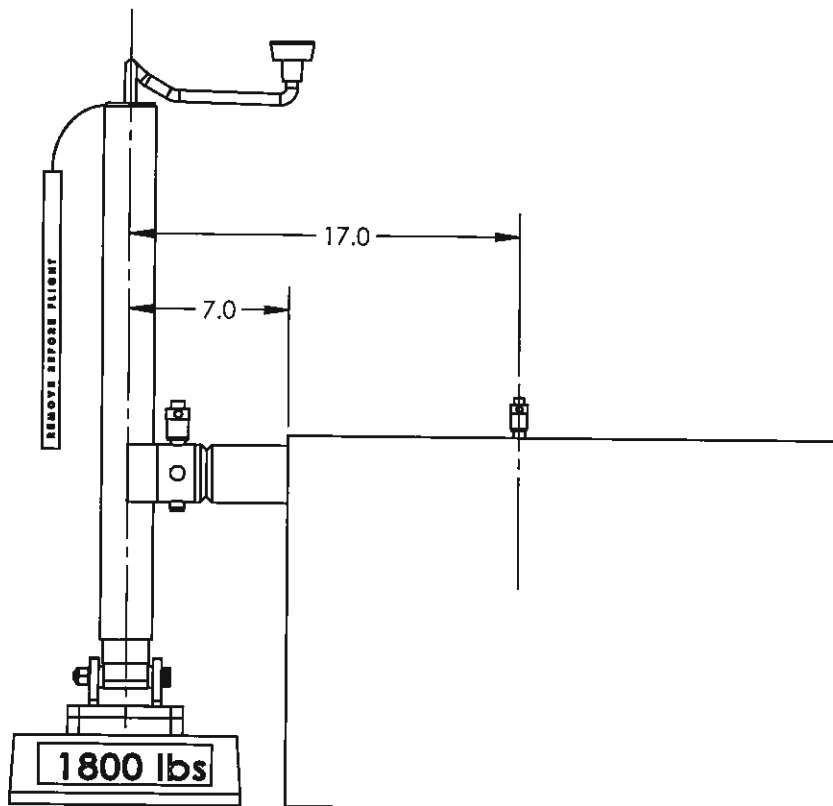
DATE 1/14/2011

SHEET 1 OF 13

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REVISIONS			
REV	DESCRIPTION	DATE	INITIAL
1A	CHANGED WEIGHT FROM 3500 TO 1800	2/23/2011	JAG

RED BARN MACHINE
190 S. DANEBO AVE., EUGENE OR. 97402
(541)344-9953; fax (541)344-3863
e-mail; sales@redbarn.net



INSPECTION & TESTING PROCEDURES FOR THE RBT18402 JACK ASSEMBLY. THIS ASSEMBLY IS DESIGNED TO LIFT A FIRE SCOUT FOR TRANSPORT. THIS ASSEMBLY SHOULD BE INSPECTED BEFORE EACH USE. REPLACE ANY ITEMS THAT ARE DAMAGED OR SUSPECTED OF DAMAGE BEFORE USING!

91 DAY INSPECTIONS

1. CLEAN ENTIRE UNIT AND REMOVE CORROSION
2. CHECK ENTIRE UNIT FOR STRESS CRACKS, BENDING, OR DISTORTIONS.
3. CHECK WELDS FOR ANY CRACKS OR DISTORTIONS.
4. CHECK THREADS FOR DAMAGE, STRESS CRACKS STRECHING, OR DISTORTIONS.
5. REPAINT IF NECESSARY.

IF ANY OF THE ABOVE CONDITIONS EXIST, OR ARE SUSPECTED OF EXISTING. DO NOT USE THE TOOL UNTIL IT HAS BEEN REPAIRED AND TEST OR REPLACED.

3 YEAR WEIGHT TESTING

1. AFTER INSPECTION, PLACE JACK ASSEMBLY ON A CALIBRATED SCALE. PLACE TUBE IN AN APPROPRIATE FIXTURE TO 7.0in AS SHOWN. USE BALL LOCK PIN TO LOCK INTO FIXTURE IN OUTBOARD HOLE (17.0in).
2. ENGAGE JACK UNTIL THE SCALE READS 1800 lbs. , FOR AT LEAST 5 MINUTES, CONTINUALLY CHECKING FOR CRACKS, DEFLECTION, OR DISTORTION.
3. REMOVE WEIGHT AND RE-INSPECT JACK, CHECKING FOR STRESS CRACKS, BENDING, OR DISTORTIONS.

RED BARN MACHINE	
TITLE FORWARD AIR TRANSPORT SHORING JACK	
DWG NO. RBT18402	REV 1A
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS XXX ± .005 XX ± .01 X ± .1	
FRACTIONS ± 1/32 ANGLES ± .5°	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:8	DATE 1/14/2011
DRAWN BY: GILBERT APPROVED: D. Weil USED ON MODEL FIRE SCOUT MQ-8B	
CUSTOMER SHEET 1 OF 1	
SHEET 12 OF 13	

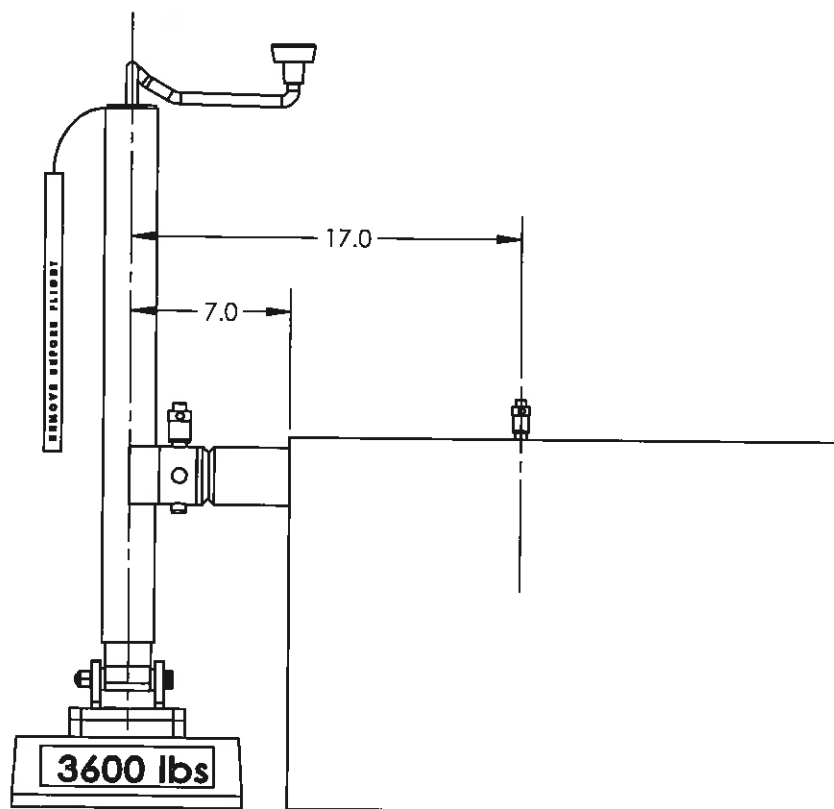
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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1A	ADDED THIS SHEET	2/25/2011	JAG	

RED BARN MACHINE
190 S. DANEBO AVE., EUGENE OR. 97402
(541)344-9953; fax (541)344-3863
e-mail; sales@redbarn.net

INSPECTION & TESTING PROCEDURES FOR THE RBT18402 JACK ASSEMBLY. THIS ASSEMBLY IS DESIGNED TO LIFT A FIRE SCOUT FOR TRANSPORT. THIS ASSEMBLY SHOULD BE INSPECTED BEFORE EACH USE. REPLACE ANY ITEMS THAT ARE DAMAGED OR SUSPECTED OF DAMAGE BEFORE USING!

FIRST ARTICLE WEIGHT TEST



FIRST ARTICLE WEIGHT TEST

1. AFTER INSPECTION, PLACE JACK ASSEMBLY ON A CALIBRATED SCALE. PLACE TUBE IN AN APPROPRIATE FIXTURE TO 7.0in AS SHOWN. USE BALL LOCK PIN TO LOCK INTO FIXTURE IN OUTBOARD HOLE (17.0in).
2. ENGAGE JACK UNTIL THE SCALE READS 3600 lbs. , FOR AT LEAST 5 MINUTES, CONTINUALLY CHECKING FOR CRACKS, DEFLECTION, OR DISTORTION.
3. REMOVE WEIGHT AND RE-INSPECT JACK, CHECKING FOR STRESS CRACKS, BENDING, OR DISTORTIONS.

INSPECTOR _____

TESTER _____

S.N. _____

DATE _____

 RED BARN MACHINE	
TITLE FORWARD AIR TRANSPORT SHORING JACK	
DWG NO.	REV
RBT18402	1A

Entered: LR Date: Oct 7/19



NCR No. 19-7394

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only ☐

Job: <u>197577</u> Part No. <u>RBT 18402</u>		DISPOSITION Rework ☒ Scrap ☐ Use-as-is ☐		DEPARTMENT/PROCESS Skid-tube ☐ Cross tube ☐ Eng. (Non-AW) ☒ Engineering ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coord. ☐ Water Jet ☐ Large Fab ☐ Finishing ☐ Rec/Store/Packaging ☐ Supplier ☐ Quality ☐																															
Date :		Sequence #:		QTY Affected :		DAS 51 (QSI042) 9-89 <u>12/09/26</u>																													
Description Work Order Deviation				Disposition		Completed By																													
2 lanyards miss place on model, the 2 lanyard are reposition on bracket for tube insert weldment add Lanyard 18" Part # <u>B# S212026</u> M6 machine screw Part # <u>94411123 # S212031</u> re tape for correct fit for screw Placard can't not be installed between gusset on foot weldment, Placard reposition on face of foot weldment with screw instead of glued on screw Part # <u>9008A106 B# S161605</u>				changing position of lanyard is a minor change, and will not interfere with jack operation Placard position in new area on foot weldment visible for operator and screw on for durability both changes are minor and acceptable		GP. Lead hand / Supervisor SEP 30 2019 QC / QA Coordinator DAS 55 9-89 30 SEP 2019																													
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY <table border="0"> <tr> <td>☐ Pressure/Forced</td> <td>☐ Contamination</td> <td>☐ Power Loss/Surge</td> <td>☐ Positioned Wrong</td> </tr> <tr> <td>☐ Bending</td> <td>☐ Misaligned/off center</td> <td>☐ Folio/Program</td> <td>☐ Outside Tolerance</td> </tr> <tr> <td>☐ Crushing</td> <td>☐ BOM/Route</td> <td>☐ Grain Direction</td> <td>☒ Drawing</td> </tr> <tr> <td>☐ Cracks</td> <td>☐ Broken/Damage/Defect</td> <td>☐ Weld</td> <td>☐ Finish</td> </tr> <tr> <td>☐ Crimp/Kink/Ripple/Wave/Twist</td> <td>☐ Incomplete/Unclear Instructions</td> <td>☐ Wrong Stock Pulled</td> <td>☐ Part Lost/Missing</td> </tr> <tr> <td>☐ Marks/Chatter</td> <td>☐ Drill Holes</td> <td>☐ Out of Sequence</td> <td>☐ Misread</td> </tr> <tr> <td>☐ Mislabeled</td> <td>☐ Fit/Function</td> <td>☐ Off-set/Set-up</td> <td></td> </tr> </table>						☐ Pressure/Forced	☐ Contamination	☐ Power Loss/Surge	☐ Positioned Wrong	☐ Bending	☐ Misaligned/off center	☐ Folio/Program	☐ Outside Tolerance	☐ Crushing	☐ BOM/Route	☐ Grain Direction	☒ Drawing	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Finish	☐ Crimp/Kink/Ripple/Wave/Twist	☐ Incomplete/Unclear Instructions	☐ Wrong Stock Pulled	☐ Part Lost/Missing	☐ Marks/Chatter	☐ Drill Holes	☐ Out of Sequence	☐ Misread	☐ Mislabeled	☐ Fit/Function	☐ Off-set/Set-up	
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☐ Mislabeled	☐ Fit/Function	☐ Off-set/Set-up																																	
Other/Details: <u>DRAWING UPDATE REQUIRED</u>																																			

Entered: 75 Date: Oct 7/19



NCR No. 19-7394 **WORK ORDER NON-CONFORMANCE / ROUTE UPDATE**

Route update only ☐

Job: <u>197577</u> Part No. <u>RBT18402</u>		DISPOSITION Rework ☒ Scrap ☐ Use-as-is ☐		DEPARTMENT/PROCESS Skid-tube ☐ Machining ☒ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☒ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier Quality ☐				
Date: <u>2019-09-30</u>		Sequence #:		QTY Affected: <u>32</u>		DMB (QS1042) 51 9-89 <u>09/09/30</u>		
Description Work Order Deviation Rime holes for -7 tube insert weldment at <u>0.630</u> then alodine and touch up with red paint				Disposition Acceptable minor deviation will not effect form or function				Completed By <u>my</u> Lead hand / Supervisor <u>[Signature]</u> 30 SEP 2019 QC / QA Coordinator DAS 55 9-89 <u>30 SEP 2019</u>
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☒ Process Improvement ☒ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☒ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread						
		Other/Details:						